

### ABSTRACT OF THE DISCLOSURE

In a hydrogen storing tank (solid filling tank) in which a hydrogen absorbing alloy (solid) is filled, a heat exchanger for executing heat exchange with the hydrogen  
5 absorbing alloy is constructed by laminating alternately a first heat-transferring fins formed in corrugated plate shape and a second heat-transferring fins formed in flat plate shape. Partitioned portions that are partitioned by the first heat-transferring fins and the second  
10 heat-transferring fins restrict movement of hydrogen absorbing alloy powders (MH powders) in a subsiding direction. Therefore, movement of the MH powders can surely be prevented by not using members that has no concern with the heat exchange and reduces an amount of filled MH  
15 powders and a volume in which the heat exchanger is provided.